

09/773,054

5

60990043-1

The indication of allowable subject matter is appreciated.

Telephone Interview

A telephone interview was conducted on November 19, 2002 between the undersigned and Examiner Nghiem. The rejection of Claims 1, 17, 28 and 30 under Section 102 based on the Nguyen reference was discussed. The Examiner suggested that applicants file a paper discussing the "in an unused condition" limitation in Claims 1, 17 and 30, and requesting reconsideration of the rejections. Also discussed was an amendment to Claim 28 to add this limitation.

Claims Rejections - 35 USC 102

Claims 1, 2, 13, 15, 17, 26 and 28-30 stand rejected as being anticipated by Nguyen et al. ("Nguyen"). Nguyen is cited as describing a replaceable sled carrying a wiper for servicing a printhead. The sled is replaced if the wiper wears out.

Claim 1 recites a method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

- identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module in an un-used condition;

- providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition.

Nguyen does not disclose identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module in an un-used condition. Rather, Nguyen describes replacing a sled if the wiper on the sled wears out.

In the office action, at page 2, section 1, the Examiner states that Nguyen teaches "identifying a printhead-related service condition not adequately addressed by servicing the printer with the first module... in an unused condition (printer is in a non-printing condition when being serviced)." However, as discussed during the telephone interview, the limitation "in an un-used condition" applied to the first service module, not to the printer being in a non-printing

09/773,054

6

60990043-1

condition when serviced. Applicants respectfully request reconsideration of the rejection.

Similar considerations apply to Claim 17 and Claim 30.

Claim 28 as amended is drawn to an inkjet printing system, comprising:

an inkjet printhead;

a service area for performing service functions on the printhead;

a first service module for removable mounting at the service area to perform service functions on the printhead during a standard printhead service mode;

a second service module for removable mounting at the service area in place of the first service module to perform a different service function from that performed by the first service module in an unused condition on the printhead during a special printhead service mode.

Nguyen does not disclose the last element of Claim 28, since the reference does not teach a second service module to perform a different service function from that performed by the first service function in an unused condition on the printhead during a special printhead service mode. The replacement sled of Nguyen is used in the standard printhead service mode, and not in a special service mode, since its purpose is replacement of a worn wiper. Moreover, the replacement sled will perform the same function as that performed by the replaced sled in an unused condition.

The rejection under Section 102 should be withdrawn.

Claims Rejections - 35 USC 103

Claims 10 and 23 stand rejected as being unpatentable over Nguyen in view of Johnson and Miller.

Claims 12 and 25 stand rejected as being unpatentable over Nguyen in view of Johnson and Terasawa et al. ("Terasawa").

Claims 14 and 27 stand rejected as being unpatentable over Nguyen in view of Shibata.

09/773,054

7

60990043-1

Claim 16 stands rejected as being unpatentable over Nguyen in view of Nystrom et al. ("Nystrom").

The claims rejected under Section 103 are dependent from the claims under rejection as being anticipated by Nguyen. Applicants respectfully request reconsideration and withdrawal of the rejections under Section 103, in view of the foregoing comments regarding the Nguyen reference.

CONCLUSION

Applicants respectfully submit that the foregoing amendments should be entered under 37 CFR 1.116(b), since the amendments to Claims 3, 5, 11, 18, 22, 24 and 32 place these claims in independent form, and therefore in condition for allowance. The amendments to Claim 28 should be entered as well, since these amendments place the claim in condition for allowance.

Respectfully submitted,



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09/773,054

8

60990043-1

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

3. (Amended) A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module in an un-used condition;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition;

[The method of claim 2, further comprising] providing a set of instructions for using the second service module with the inkjet printer to the printer user.

5. (Amended) [The method of claim 1, further comprising:] A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module in an un-used condition;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition;

removing the first service module from the printer;

installing the second service module in the printer in place of the first service module;

using the second service module, conducting a special printhead-related servicing operation.

11. (Amended) [The method of claim 1] A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module in an un-used condition,

09/773,054

9

60990043-1

wherein said printhead-related service condition includes ink accumulation on the nozzle plate[.];

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition; [and wherein] the second service module [includes] including a wiper or applicator having applied thereto a cleaning fluid for removing the ink accumulation.

18. (Amended) [The method of Claim 17, further comprising] A method for servicing an inkjet printer including an inkjet printhead and a removable first service module, comprising:

providing a second service module different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module in an unused condition; and

installing the second service module in the printer;

conducting a printhead-related service operation using the second service module; and

providing a set of instructions for using the second service module with the inkjet printer to the printer user.

22. (Amended) [The method of claim 17, further comprising:] A method for servicing an inkjet printer including an inkjet printhead and a removable first service module, comprising:

providing a second service module different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module in an unused condition; and

installing the second service module in the printer;

conducting a printhead-related service operation using the second service module;

after completion of the printhead-related servicing operation, removing the second service module from the printer; and

installing the first service module in the printer in place of the second service module.

09/773,054

10

60990043-1

24. (Amended) [The method of claim 17] A method for servicing an inkjet printer including an inkjet printhead and a removable first service module, comprising:

providing a second service module different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module in an unused condition, wherein said printhead-related service condition includes ink accumulation on the nozzle plate, and wherein the second service module includes a wiper or applicator having applied thereto a cleaning fluid for removing the ink accumulation;

installing the second service module in the printer;

conducting a printhead-related service operation using the second service module.

28. (Amended) An inkjet printing system, comprising:

an inkjet printhead;

a service area for performing service functions on the printhead;

a first service module for removable mounting at the service area to perform service functions on the printhead during a standard printhead service mode;

a second service module for removable mounting at the service area in place of the first service module to perform a different service function from that performed by the first service module in an unused condition on the printhead during a special printhead service mode.

32. (Amended) [The method of claim 16, further including:] A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module in an un-used condition, said printhead-related service condition including vibration or shock incurred during shipment or moving of the printer, the second service module including a special capping structure having a range of movement along an axis generally transverse to a nozzle array of the printhead, and a bias structure which urges the capping structure toward and into engagement with the printhead during a capping procedure, and wherein the special capping structure including a

09/773,054

11

60990043-1

relative hard, non-resilient cap structure which contacts the printhead during the capping procedure;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition; and

performing the capping procedure with the second service module installed in the printer, and maintaining contact between the non-resilient cap structure and the printhead to prevent a pumping action on the printhead when subjected to vibration and shock.